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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/691,427 10/22/2003 Wolfgang Wolff H 5165 PCT/US 7828 12/14/2004 EXAMINER **HENKEL CORPORATION** ELHILO, EISA B THE TRIAD, SUITE 200 2200 RENAISSANCE BLVD. ART UNIT PAPER NUMBER GULPH MILLS, PA 19406 1751

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	t
Office Action Summary	10/691,427	WOLFF ET AL.	
	Examiner	Art Unit	
	Eisa B Elhilo	1751	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	th the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a  - If NO period for reply is specified above, the maximum statutory per  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a re- reply within the statutory minimum of thirt- iod will apply and will expire SIX (6) MON atule, cause the application to become AB	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communic	cation.
Status			
1) Responsive to communication(s) filed on 11		•	
	his action is non-final.		
3) Since this application is in condition for allow			ts is
closed in accordance with the practice unde	er Ex parte Quayle, 1935 C.D.	. 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-5,7-9 and 11-23</u> is/are pending ir	n the application.		
4a) Of the above claim(s) is/are withd			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-5,7-9 and 11-23</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	d/or election requirement.		•
Application Papers			•
9)☐ The specification is objected to by the Exami	iner.		
10)☐ The drawing(s) filed on is/are: a)☐ a		y the Examiner.	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the corre	ection is required if the drawing(s	s) is objected to. See 37 CFR 1.12	21(d).
11) ☐ The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152	2.
Priority under 35 U.S.C. § 119			
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:		119(a)-(d) or (f).	
1. Certified copies of the priority docume			
2. Certified copies of the priority docume			
<ol> <li>Copies of the certified copies of the pr application from the International Bure</li> </ol>		eceived in this National Stage	
* See the attached detailed Office action for a li		aceived	
	are a serial of copies not n	300110 <b>u</b> .	
Attachment(a)			
Attachment(s)  1)  Notice of References Cited (PTO-892)	<b>,</b> , □ , , , ,	(270)	
2) Notice of Praftsperson's Patent Drawing Review (PTO-948)	4) [] Interview Su Paper No(s)/	mmary (PTO-413) Mail Date	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	8) 5) Notice of Info	ormal Patent Application (PTO-152)	
S Patent and Trademark Office	6)	·	

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#### **DETAILED ACTION**

- This action is responsive to the amendment filed on October 11, 2004.
- 2 The cancellation of claims 6 and 10 is acknowledged. Pending claims are 1-5, 7-9 and 11-23.
- The rejections of the claims under 35 U.S.C. 102(b) and 103(a) are withdrawn because of the applicant's amendment.

#### NEW GROUND OF REJECTION

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 7-9, 11-12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7-9, 11-12 and 14 are indefinite because the claims recite the limitation "formula (I)". There is insufficient antecedent basis for this limitation in the claims because the claims are dependent on the amended claim 1.

#### Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-5, 13, 15, 17-22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Madrange et al. (US 5,143,518) in view of Cotteret et al. (US 5,735, 908).

Madrange et al. (US' 518) teaches a hair dyeing composition comprising oxidation dye precursors (see col. 12, line 60-61), silicone polymers of dialkyl polysiloxane such as dimethyl polysiloxane as claimed in claims 1- 4 (see col. 31, claim 12) and cationic polymer such as a copolymer of dimethyldiallylammonium chloride with acrylamide (Merquat 550) as claimed in claim 13 (see col. 12, lines 38-45), amodimethicone as claimed in claim 5 (see col. 2, line 45), cationic homopolymer of dimethyldiallylammonium chloride (Merquat 100) primary intermediates (oxidation bases) as claimed in claim 15 (see col. 12, line 62-64), secondary intermediates (couplers) as claimed in claim 17 (see col. 12, lines 65-68), direct dyes (substantive dye) as claimed in claim 18 (see col. 14, line 17). Madrange (US' 518) also teaches a method for dyeing hair comprising applying to the hair the dyeing composition as described above to which there is added an oxidizing agent and the mixture is left on hair for a sufficient time and after which the hair is rinsed and dried wherein the reference's method is similar to those claimed in claims 19-22 (see col. 15, lines 50-68 and col. 16, lines 1-2).

Although Madrange et al. (US' 518) teaches a hair dyeing composition comprising homopolymers and co-polymers as described above, Madrange et al. (US' 518) does teach an amphoteric polymer as claimed. Further, Madrange et al. does not teach a two-component kit as claimed.

Cotteret et al. (US' 908) in analogous art of hair dyeing formulation, teaches a composition comprising amphoteric co-polymers of diallyldimethylammonium chloride/ acrylic acid (Merquat 280) as claimed in the instant claims (see col. 4, lines 53-54) and cationic polymer

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such as co-polymer of dimethyldiallylammonium chloride/acrylamide (Merquat 550) (see col. 4, lines 3-4). Cotteret et al. Also teaches a multi-compartment dyeing devices or kits which are similar to the claimed kit as claimed in claim 23 (see col. 2, lines 60-67).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Madrange et al. (US' 518) by substituting the cationic co-polymer of dimethyldiallylammonium chloride /acrylamide (Merquat 550) with the amphoteric co-polymers of diallyldimethylammonium chloride/acrylic acid (Merquat 280) as taught by Cotteret et al. (US'908) to make such a composition with a reasonable expectation of success because the primary reference of Madrange et al. (US' 518) suggests the use of the cationic co-polymer of dimethyldiallylammonium chloride/acrylamide (Merquat 550) in hair dyeing composition. The secondary reference of Cotteret et al. (US' 908) clearly teaches the equivalence between amphoteric co-polymer of diallyldimethylammonium chloride/acrylic acid (Merquat 280) (see col. 4, lines 53-54) and cationic co-polymer of dimethyldiallylammonium chloride/acrylamide (Merquat 550) (see col. 4, lines 3-4), wherein the dyeing composition is provided in a dyeing devices or kits, and, thus, a person of an ordinary skill in the art would expect that the use of amphoteric co-polymers of diallyldimethylammonium chloride/acrylic acid (Merquat 280) in a hair dyeing composition as taught by Cotteret et al. (US' 908), would be similarly useful and applicable to the analogous dyeing composition taught by the primary reference of Madrange et al. (US' 518), absent unexpected results.

5 Claims 1, 13 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millequant et al. (US 6,312,677 B1).

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Millequant et al. (US' 677 B1) teaches a hair dyeing composition comprising silicone polymers (see col. 10, formula VI) and co-polymer of dimethyldiallylammonium chloride and acrylic acid (Merquat 280) (amphoteric polymer) as claimed in claims 1 and 13 (see col. 13, lines 44-49), oxidation dye precursors (primary intermediates), couplers (secondary intermediates), indole precursors and direct dyes as claimed in claims 1 and 15-18 (see col. 14, lines 23-42). Millequant et al. (US' 677) also teaches a similar method for dyeing hair comprising applying to the hair the dyeing composition as described above after diluted at the time of use with the oxidizing solution wherein the composition is allowed to act for a period of time and the hair is then rinsed as claimed in claim 19 (see col. 15, lines 59-64).

Although Millequant et al. (US' 677 B1) generally discloses a hair dyeing composition comprising oxidation dye precursors, amphoteric polymers and silicone polymers, the reference does not require such a dyeing composition with sufficient specificity to constitute anticipation.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a dyeing composition, as taught by Millequant et al, which contained oxidation dye precursors, amphoteric polymers and silicone compounds, because such a dyeing composition falls within the scope of those taught by Millequant et al. Therefore, one of an ordinary skill in the art would have had a reasonable expectation of success, because such a dyeing composition containing oxidation dye precursors, amphoteric polymers and silicone compounds is expressly suggested by the disclosure of Millequant et al. (US' 677 B1) and therefore, is an obvious formulation.

## Response to Applicant's Arguments

Applicant's arguments filed on 10/11/2004 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eisa Elhilo

December 9, 2004

MARGARET EINSMANN PRIMARY EXAMINER

GROUP 1100